national importance at a given point in time.

(b) 33 U.S.C. 1125 provides for the funding of national projects in marine research, marine education and training, and marine advisory services that are designed to deal with the national needs and problems concerning ocean and coastal resources identified by the Administrator.

(c) The Administrator will identify the national needs and problems apart from considerations of Office of Sea Grant funding for ''National Projects'' responsive to national needs and problems that are identified.

§ 917.21 National needs and problems.

(a) The Administrator will, periodically, publish in the FEDERAL REGISTER the identified national needs and problems with respect to ocean and coastal resources at a given point in time.

(b) Suggestions from the general public as to the identity of national needs and problems may be submitted to the Office of Sea Grant at any time. These suggestions will be reviewed by the Office of Sea Grant and the Sea Grant Review Panel, and those receiving a positive critique will be forwarded to the Administrator. In addition, suggestions concerning the identification of national needs and problems will be requested from the Sea Grant Program Directors.

(c) The Administrator has identified the following as currently being national needs and problems with respect to ocean and coastal resources:global and regional climate and primary productivity.

(1) Improve the prediction of extreme natural events and their effects on ocean coastal and continental shelf locations as well as analogous regions of the Great Lakes.

(2) Improve the predictability of global sea-level change and determine the impact of this change on coastal areas.

(3) Define the processes that determine ocean variability on the time scale of a few weeks to a few years, and the relationship to fluctuations in global and regional climate, primary productivity, and fisheries production.

(4) Improve understanding of the flow fields and mixing processes on the continental shelves of the United States.

(5) Develop an increased understanding of the arctic and antarctic environment and a capability to predict the special hazards posed to transportation and resource development.

(6) Develop and increased capability to characterize the engineering properties of ocean botton sediments.

(7) Reduce the recurring economic loss due to corrosion of structures, vessels, and other devices in the marine environment.

(8) Gain a fundamental understanding of the processes by which biological fouling and associated corrosion are initiated upon material surfaces exposed to seawater.

(9) Investigate methods to improve man's underwater capability to conduct undersea research and perform useful work.

(10) Investigate the wider application of remotely operated and artificial intelligence techniques for vehicles for undersea activities.

(11) Expand/improve remote sensing technologies for use on the ocean and Great Lakes.

(12) Advance knowledge of acoustics in the ocean and ocean bottom in order to exploit the burgeoning acoustics technologies.

(13) Develop techniques for in-situ monitoring of biological, chemical, and physical processes in the Great Lakes, oceans, and their connecting waterways which are cost effective and provide data in real time.

(14) Improve the position of the U.S. seafood industry in world seafood markets.

(15) Design more efficient mechanisms to allocate U.S. fish resources to achieve optimum yield and minimize industry dislocations.

(16) Gain a fundamental understanding of the biological productivity of estuarine and coastal waters.

(17) Conduct research leading to the restoration and/or enhancement of heavily exploited fishery stocks.

(18) Improve the capability for stock assessment, predicting yield, age-class strength, and long-term population status of important fisheries.

(19) Conduct research to increase the economic potential of low-value, high-volume fish products.

(20) Develop productive and profitable aquaculture industries in the United States and technology that can be exported to less developed nations of the world with different climate, cultural, and economic constraints.

(21) Explore marine biochemicals as source of chemical feedstocks, enzymes, pharmacological substance, and other bioactive agents such as pesticides.

(22) Apply modern biotechnology to exploiting marine plants, animals, and microorganisms for good and services.

(23) Develop rapid, efficient, and specific methods for assaying the potential of marine organisms to communicate disease to humans.

(24) Develop innovations that would promote safe, nondestructive, recreational access to and use of marine and Great Lakes water.

(25) Re-examine the ocean as an appropriate place for the disposal of wastes from land-based society.

(26) Develop an increased understanding of the impacts of low density, nonbiodegradable, solid wastes on marine and Great Lakes species.

(27) Conduct research for realizing the economic potential of the nonliving resources of the U.S. 200-mile Exclusive Economic Zone.

(28) Investigate the effect of seafloor hydrothermal systems on the seafloor, oceans, and atmosphere.

(29) Develop a better understanding of the value the marine sector contributes to the U.S. economy and culture.

(30) Improve the competitive position of American ports in the face of rapid technological and social change.

(31) Improve the capability of developing nations to address their marine resource needs.

(32) Develop eductional programs to increase application of marine sector research.

(33) Develop syntheses of and better access to existing multidisciplinary marine and Great Lakes information.

[43 FR 15307, Apr. 11, 1978, as amended at 51 FR 35210, Oct. 2, 1986]

§917.22 National Projects funding.

(a) National Projects funding proposals will be expected to address: (1) The relevance of the proposed project to a national need or problem that has been identified by the Administrator; (2) the nature and focus of the proposed project; (3) a demonstrated capacity to carry out the proposed project in a competent and cost-effective manner; and (4) the utilization of existing capability and coordination with other relevant projects. Innovation and uniqueness will be significant factors in determining whether to fund a proposed project.

(b) Any person may apply to the Office of Sea Grant for National Project funding. In addition, the Office of Sea Grant may invite applications for National Project funding.

(c) The total amount provided for National Projects' funding during any fiscal year can never exceed an amount equal to 10 percent of the total funds appropriated for the Matched Funding Program. Federal Sea Grant funding for National Projects can be up to 100 percent of the total cost of the project involved.

Subpart D—International Cooperation Assistance

§917.30 General.

(a) 33 U.S.C. 1124a sets up a program of International Cooperation Assistance in marine reseach, marine education and training, and marine advisory services designed to enhance the research and technical capability of developing foreign nations with respect to ocean and coastal resources and to promote the international exchange of information and data with respect to the assessment, development, utilization, and conservation of such resources. Any Sea Grant College or Sea Grant Regional Consortium or any institution of higher education, laboratory, or institute (if such institution, laboratory or institute is located within any state) may apply for and receive International Cooperation Assistance funding.

(b) International Cooperation Assistance funding proposals will be expected to address: (1) The nature and focus of